

COLUMBIA RIVER REGIONAL FORUM

TECHNICAL MANAGEMENT TEAM

MEETING NOTES

May 22, 2002

**CORPS OF ENGINEERS NORTHWESTERN DIVISION OFFICES – CUSTOM HOUSE
PORTLAND, OREGON**

TMT Internet Homepage: <http://www.nwd-wc.usace.army.mil/TMT/index.html>

DRAFT

FACILITATOR’S SUMMARY NOTES ON FUTURE ACTIONS

Facilitator: Donna Silverberg

The following notes are a summary of issues that are intended to point out future actions or issues that may need further discussion at upcoming meetings. These notes are not intended to be the “record” of the meeting, only a reminder for TMT members.

Hanford Reach/Vernita Bar:

Chris Carlson of the Grant County PUD’s reported on the weeks of May 6 – 12 and May 13 –19. The group looked at the chart posted on the website and Chris clarified the purpose of some of the numbers. He will continue to work with dispatchers to keep flows as smooth as possible.

Weather Update:

The National Weather Service reported on weather forecasts for the region.

Final Water Management Plan:

Response to comments from Idaho, Montana, NMFS and USFWS were handed out with the final WMP. It is also posted on the website. There were questions about how comments are incorporated into the Plan and where detailed issues are placed.

Action: All TMT members will review the comments. TMT will hold a session in July specifically to discuss how well the WMP is working. This is the Action Agencies’ first attempt and they welcome suggestions on ways to improve the Plan. Donna Silverberg will work with the Action Agency team and the Salmon Managers to develop an agenda and structure for the July meeting.

Spring/Summer Update:

The USFWS gave comments on the Spring/Summer Update to Scott Bettin. They will be posted on the website for everyone to review.

Action: TMT will discuss the comments at the next meeting if necessary.

Upper Snake Water Information:

At the last meeting, the Salmon Managers requested information on upper Snake water. Oregon explained that this was to assist them in the development of flow management plans for summer. More detailed knowledge is needed for the Salmon Managers to create a plan for use of Dworshak. The BOR will bring a spreadsheet of upper Snake numbers to the next meeting. The BOR will provide 300 cfs through August for trout spawning at the request of Idaho Fish and Game.

Idaho Power Operations:

Jon Bowling reported that Brownlee is at 2075.5' and will pass inflows for the next few days (14-16 kcfs) and possibly into the weekend. Jon said the goal is to reach 2077' by July 1 and he reminded the group that they cannot draft more than 1' from the highest elevation for resident fish.

Spring Treaty Fishery:

Kyle Martin of CRITFC gave a positive report on this year's spring treaty fisheries. The results are posted as a link to today's agenda on the website. The Action Agencies asked if there were any complaints or incidents from this year. None are known but Kyle will check into this. Compliance was high this year. The success seems to be a result of advanced planning and overall high adult counts.

Action: At the request of TMT, Kyle will email the numbers of fish caught by tribal fisheries for this year.

Review Current System Conditions:

Fish Migration Status: Yearling chinook numbers are down at Lower Granite. The RSW test may have something to do with this as there are more fish at Little Goose. The runs seem to be late in the Snake. There is some concern about how low the numbers are at this point in the season. Adults are late but the numbers are high. Chum emergence is ending at Hamilton Creek but still occurring at Hardy Creek.

Action: Ron Boyce and Shane Scott will share a Mainstem chum emergence end date with TMT at the next meeting.

Reservoir Operations:

Action: TMT will have comments on the emergency spill priority list for discussion at the June 5 meeting.

There is a potential for involuntary spill at Lower Monumental due to a unit being down. The group discussed a number of possibilities to reduce or eliminate spill: operate outside the 1% requirement, increase the pond (outside MOP + 1) to eliminate spill, or use the ponding option but set a limit.

Action: TMT agreed to pond as long as necessary to make sure the unit is back in service, but if not by tomorrow (5/23) morning, hold an emergency TMT call to discuss what actions to take. If a call is needed, the COE will make sure a technical COE expert is on the call to answer questions.

SOR 2002-4:

The Salmon Managers requested specific operations at Lower Granite for May 22-28 and McNary for May 22 – June 6.

The COE expressed their preference to minimize outflows at Dworshak until the end of June. CRITFC supports the SOR but would like Dworshak water to be used sparingly.

Agreement: The COE will operate DWR to provide up to 10 kcfs discharge, and total volume up to 50 ksf (~100 kaf), as needed to attempt to meet 97 kcfs weekly average flow at LWG. Weekly average flow is for 20 - 27 May, which includes Memorial Day. Higher discharges will be shaped earlier in the augmentation period, less during the holiday weekend, for load shaping. DWR discharge will be reduced to minimum on 28 May and held there for end-of-June refill.

Brownlee: Idaho Power (by luck) will operate to meet the requested 97 kcfs at Lower Granite.

McNary will operate to meet 246 kcfs flow objectives through June 9th, as requested – as long as Grand Coulee is above 1240'. If the forecast changes dramatically, an emergency TMT call will be convened to discuss operations.

Other:

Lower Monumental: A current teletype reads that there will be full flow bypass at Lower Monumental through June 2. If there is no effect on studies being done there, the COE could extend the operation to June 20.

Action: The Salmon Managers will discuss this option and email to the COE the operation they prefer.

Little Goose: MOP + 1 to MOP + 2 is in effect for navigation. Flows are high enough that the COE could reduce the pool to MOP + 1 or MOP.

Action: The group agreed to go to MOP/MOP + 1 and shape the water later when flows are lower (Friday or Saturday). This will be on the next agenda to discuss refill.

The Technical Advisory Committee has concerns with the adult fallback study results and its impact on juvenile fish. There will be an update at the next meeting on this.

Next Meeting, June 5:

Agenda Items:

- Snake Water Spreadsheet – BOR
- Idaho Power Operations Update
- Chum Emergence End Date – Shane Scott and Ron Boyce
- Comments on Spill Priority List

- Adult Fallback Study Results – Technical Advisory Committee
- Current System Conditions
- Hanford Reach/Vernita Bar
- Weather Update
- Review Operations Requests
- Other

Meeting Minutes

1. Greeting and Introductions

The May 22 Technical Management Team meeting was chaired by Rudd Turner of the Corps and facilitated by Donna Silverberg. The following is a distillation, not a verbatim transcript, of items discussed at the meeting and actions taken. Anyone with questions or comments about these minutes should call Turner at 503/808-3935.

2. Hanford Reach Update.

Chris Carlson of Grant County PUD said that, for the week of May 6-12, a single juvenile chinook was found during random-site sampling; index seining took place on May 8, during which field personnel recorded an average length of 45 mm. The flow band was missed on May 6 due to a flow transitioning problem; however, fish impacts were minimal because flows steadily increased throughout the day. We were also off on May 8, because of a load problem, Carlson said.

For the week of May 13-19, Carlson continued, field crews looked at 14 fish monitoring sites, finding eight juvenile chinook, seven of which were mortalities. On May 15, index seining looked at 1,739 fish, average fork length 47.5 mm. We missed the flow band on a number of days during this week, due to a line outage and dispatcher error, he added. Will information on the reason for these excursions be included in Grant County's annual report? Ron Boyce asked. I believe so, Carlson replied. He added that he is continuing to work with Grant's dispatchers to eliminate dispatcher error.

3. Weather Update.

Dan from the National Weather Service reported that, over the past 24 hours, a low-pressure system tracked off from Idaho to Montana; precipitation from the system was heavy in the mountains of Idaho, Montana and southern British Columbia – as much as 1.5 inches across a widespread area. Morning freezing levels have been in the 4,500-6,000-foot range, with blizzard warnings in force in parts of Montana. Snow is forecast today from northern Idaho to western Montana. High pressure is starting to build, however, and precipitation is expected to decrease tomorrow and Friday; daytime freezing levels are expected to rise into the 8,000-11,000-foot range today and tomorrow. Another weather system is moving in behind that one, and is expected to bring some precipitation to the Northwest this weekend.

Over the longer term, extending into the end of next week, a strong ridge of high pressure is expected to bring a drying trend to the Northwest, Dan said. Temperatures are expected to be above-normal during the middle and latter portions of next week.

Tom Fero of the NWS noted that Lower Granite flows peaked at about 112 Kcfs today, and are expected to recede to the 70-75 Kcfs range over the next four days. Columbia River flows will be about 270 Kcfs over the next two days, followed by a recession to about 220-220 Kcfs into the foreseeable future. Upper Columbia flows are slightly on the wane, currently, but should also stay relatively high, Ferro said. In response to a question from Kyle Martin, Ferro said that, in his opinion, the precipitation expected over the next few days should bring many basins in the Northwest into the near-normal range for May precipitation.

4. Final Water Management Plan.

Turner noted that copies of both the final 2002 Water Management Plan (WMP) and the action agencies' responses to comments are now available via the TMT homepage; he thanked BPA's Suzanne Cooper for her hard work in finalizing the plan. The group devoted a few minutes of discussion to the action agencies' responses to the comments from various agencies and tribes, some of which was focused on the replies "Too detailed to include in the Water Management Plan" and "This item will be addressed during the in-season management period." Ultimately, Silverberg suggested that the group defer this discussion, as well as discussion of the 2003 Water Management Plan, until a special TMT session in late June or early July, by which time all participants will have had a chance to review the action agencies' response to their comments. It was so agreed.

Scott Boyd noted that, barring any changes dictated by new information from studies, the 2003 WMP will likely be very similar to the WMP submitted in 2002; he asked that any significant comments with a bearing on next year's WMP be submitted to him or to Cooper.

Turner noted that the final spring/summer update to the 2002 WMP was distributed two weeks ago. Ron Boyce stated that Oregon does not have any comments on the spring/summer update. David Wills said the Fish and Wildlife Service has a few comments on the spring/summer update; no other comments have been provided. Turner said the USFWS comments will be posted to the TMT website.

5. Boise Water Information.

Tony Norris said most of the Snake River flow augmentation water will be provided from the Boise and Payette systems in 2002. With respect to a previous question from Boyce, Norris said it is not possible, at this time, for Reclamation to say which specific reservoirs will furnish that water; there are still a lot of reservoirs that are not full and likely will not fill in 2002. Norris reiterated that, given the current water supply forecast for the Upper Snake basin, it is unlikely that Reclamation will be able to provide the full 427 KAF of flow augmentation water this summer; he said the figure will likely be closer to 300 KAF.

The group also discussed Reclamation's decision to begin releasing 300 cfs from Lucky

Peak Reservoir; Norris explained that the release was at the request of IDFG, in support of a rainbow trout fishery below that project. Boyce noted that the reason he has pursued this information is the fact that the salmon managers are going to begin discussions on a summer flow management plan for the Snake River in 2002, hence the need for detailed information on planned project-by-project operations. The sooner you can provide that information to us, the better, he said. In response to a question from Turner, Boyce said the plan will be used to inform the salmon managers' SOR development process; the plan will likely not be submitted to the TMT.

6. Status of Idaho Power Operations/Biological Opinion.

John Bowling of Idaho Power said Brownlee Reservoir is currently at elevation 2075.5 feet and passing inflow, at least for the next few days. Inflows have been in the 15 Kcfs-17 Kcfs range in recent days, which means outflows should be in the 14 Kcfs-16 Kcfs range, Bowling said. Over the next two weeks, he said, Brownlee will creep up toward the 2077 mark; for the time being, he said, we will leave some space in the reservoir in case of a sudden major precipitation or runoff event. We're hoping to be at full pool at Brownlee no later than July 1, he added. From a practical standpoint, then, Idaho Power will be passing inflow through the end of June? Turner asked. That's correct, Bowling replied.

7. Review of Spring Treaty Fishery.

Kyle Martin noted that CRITFC's report on the impact of pool fluctuations on the spring treaty fishery is now available via a hot link on the TMT website; he spent a few minutes going through this document. CRITFC submitted six separate SORs requesting stable pool elevations in Bonneville, The Dalles and John Day pools in support of various tribal fisheries this spring. As far as operations impacting the spring treaty fishery, the Corps agreed to maintain a 1.5-foot operating range in Bonneville pool only; Martin noted that there is a difference of opinion between the Corps and CRITFC about what the operating range in the three pools should be during the tribal fisheries.

In general, said Martin, John Day pool was in compliance with CRITFC's requested one-foot operating range 44% of the time during this spring's treaty fisheries; Celilo (The Dalles) 41%, and Bonneville pool 63% of the time. That compares to only 8% of the time in 2001, Martin said, so Bonneville pool compliance was much better this year. Catch efficiency was good this year, and there were few complaints from the tribal fishers. Martin noted that compliance during the final tribal fishery was 100%; he said the Corps and BPA deserve congratulations for their efforts to maintain stable pools.

Turner noted that it is much more difficult to meet these kinds of operating range requests during the spring, when flows and weather are quite variable; it is much easier to meet them during the fall. Our main concern is whether or not the operations we put in place result in satisfactory or unsatisfactory fishing conditions, he said, noting that the Corps has not received any complaints this year. I haven't heard any complaints either, Martin said. He added that he will provide final figures on the total size of the 2002 adult spring chinook run at a future TMT meeting.

8. Current System Conditions.

Chris Ross reviewed the current status of the fish migration, beginning with year-to-date cumulative passage information for yearling chinook at Lower Granite, which he characterized as lower than expected for this date. Cumulative juvenile steelhead passage at Lower Granite is also lower than expected for this date. Does that factor in the RSW at Lower Granite? Scott Bettin asked. No – we are seeing higher passage numbers at Little Goose than we are at Lower Granite on some days, Ross replied. Still, that discrepancy does not make up for the difference in the expected year-to-date passage, Boyce observed.

Moving on to McNary, Ross said wild Snake River chinook passage at this project has been increasing in recent days. He added that endangered Upper Columbia steelhead PIT-tag detections continue to be very low. The bottom line, said Ross, is that the Snake River outmigration continues to be delayed. In addition, said Boyce, we're very concerned about the fact that cumulative passage to date is only about half of what NMFS had projected for this date before the season began; that is likely because there are still a lot of fish waiting to get out. It may also be because NMFS' pre-season estimates were incorrect, Scott Bettin observed – they're not seeing a lot of fish at the upstream traps at this time. The traps don't provide an abundance index, Ross replied – the numbers you see there are not reflective of the number of fish in the run at large.

With respect to adult passage to date, Ross said that, while numbers have been good, the adult run peaked later than expected, indicating that some delay may have occurred. Boyce noted that it now appears that the pre-season estimate of 330,000 adult spring chinook will be met. Ross added that 2.1% of the total 2002 adult spring chinook run has been jacks, which compares to a 10-year average of just over 6%. However, that is in the context of a very large adult run, he said; if we look at absolute numbers, the 2002 jack count is 131% of the 10-year average. If the normal percentages hold true, Ross said, that means we should be looking at a larger-than-average adult spring chinook run in 2003 as well. Another way of looking at it is the fact that the disastrous jack counts many were predicting because of the terrible in-river conditions in 2001 have not materialized, said Boyce – the 2002 jack run was better than many expected. Turner observed that the vast majority of the 2002 jacks were transported last year, and encountered good ocean conditions.

The group briefly discussed 2002 chum emergence; Boyce and Shane Scott agreed to provide the official date of the end of mainstem chum emergence at the next TMT meeting.

Moving on to the status of the system, Turner said the day-average flow at Bonneville yesterday was 268 Kcfs; the project is spilling 75 Kcfs during the day. Week-average flows at Bonneville were 218 Kcfs for the week ending May 19; a week-average flow of 263 Kcfs is projected for this week, he said. Day-average flow at McNary yesterday was 273 Kcfs, Turner said; for the week ending May 19, the average flow at McNary was 210 Kcfs, and a week-average of 246 Kcfs is projected at McNary this week.

At Lower Granite, yesterday's average flow was 109 Kcfs, Turner said; it looks as though

flows at that project will peak today, then begin to recede somewhat. The average flow at Lower Granite for the week ending May 19 was 67 Kcfs, and we're projecting an average flow of 104 Kcfs this week, Turner said. Spill was 40 Kcfs yesterday. At Dworshak, the elevation was 1523 feet as of midnight last night; the project filled four feet yesterday and 12 feet over the past week. You will recall that Dworshak went to minimum outflow (1.6 Kcfs) on Monday, Turner said; yesterday's inflow to the project was about 29 Kcfs.

Libby elevation is currently 2390, Turner continued, with outflow of 8 Kcfs and inflow of 45 Kcfs; the project filled 2.5 feet yesterday and 15 feet over the past week. There is a flood concern at Bonners Ferry, where they're forecasted to get within 1.5 feet of flood stage; we don't expect flooding to occur, he said, but the Corps is watching the situation closely and may have to reduce Libby discharge to attempt to lower the maximum stage at Bonners Ferry. This could include ramp rates faster than the BiOp rates, to provide flood control.

Moving on to Albeni Falls, Turner said the project is now gradually filling -- about elevation 2058. Project outflow has just been increased from 45 Kcfs to 58 Kcfs, he said. Tony Norris said the current elevation at Hungry Horse is 3518 feet; the project is filling rapidly, with inflows of 28.6 Kcfs and outflows of about 3 Kcfs. The current Grand Coulee elevation is 1242 feet, and as Rudd said, we're targeting 246 Kcfs as a week-average flow at McNary for the next two weeks, said Norris. We're expecting to be just above flood control elevation -- 1245 feet -- by the end of that period, he added. According to our current flood control guidance, said Turner, it looks as though Grand Coulee refill will begin next week.

And the power system? Silverberg asked. So far, so good, Bettin replied. In response to a question, Boyce said the salmon managers didn't get very far in discussing the emergency priorities list at this week's FPAC meeting; they will submit their comments at a later date.

Water quality? Silverberg asked. Dick Cassidy drew the TMT's attention to the various water quality resources available on the Internet; he said the main topic to discuss today is McNary's spill priority, now that the access bridges have been removed. In response to a question from Bettin, Cassidy said the gate hoists still are not operational; Turner added that McNary will be going to a new spill pattern later today, with the gates raised three feet and left in that position 24 hours a day. And we're up to BiOp spill levels at all other projects? Boyce asked. As close as we can get, yes, Cassidy replied.

Turner added that a unit went down at Lower Monumental this morning, which means that there may be some involuntary spill at that project starting today -- powerhouse capacity is currently right around 100 Kcfs, which means we might see a few hours of spill at around 15 Kcfs. The group discussed the possibility of operating Lower Monumental's generating units outside 1% peak efficiency or using pondage at the project in order to obviate the need to spill; ultimately, it was agreed to allow Lower Monumental to operate outside of 1% peak efficiency as needed to avoid spill today; if the generating unit is not back in service by tomorrow morning, there will be an emergency TMT call to discuss operations at that project.

9. New System Operational Requests.

On May 21, the action agencies received SOR 2002-4. This SOR, supported by USFWS, NMFS, ODFW, IDFG, CRITFC, the Nez Perce Tribe and WDFW, requests the following specific operations:

Beginning immediately, for the period May 22-May 28 at Lower Granite Dam and May 22-June 2 at McNary Dam:

- Adjust Dworshak outflows in accordance with flows recorded at Lower Granite Dam above the 97 Kcfs Biological Opinion flow objective
- Begin passing inflows at Brownlee Reservoir to meet the BiOp flow objective of 97 Kcfs at Lower Granite Dam
- Meet the Biological Opinion flow objective of 246 Kcfs at McNary Dam on a week-average basis. This operation includes the potential drafting of Grand Coulee to 1237 feet and incorporates the Bureau of Reclamation agreement on May 15 not to fill Grand Coulee above 1240 feet if the flow objective of 246 Kcfs at McNary Dam is not being met.

Boyce spent a few minutes going through the specifics of this SOR, the full text of which is available via the TMT homepage.

With respect to the request to adjust Dworshak outflows, said Turner, there is still some difference between the various forecasts; the RFC forecast is running leaner than the Corps' forecast. According to the RFC forecast, even if we go to minimum outflow at Dworshak this week, we will miss Dworshak refill on June 30 by 10 feet, and by 7 feet by the time we normally start to use Dworshak for flow augmentation in early July. The Corps' forecast, on the other hand, shows that we've got about 140 KAF of spring flow augmentation volume to work with if we're to achieve a 70% confidence of Dworshak refill by June 30.

With Dworshak at minimum outflow, said Turner, we would expect an average flow at Lower Granite of about 93 Kcfs during the period covered by this SOR; we would need to provide up to five days of 10 Kcfs outflow -- about 100 KAF -- in order to meet the 97 Kcfs week-average flow target at Lower Granite. The Corps would be willing to provide that additional flow if the salmon managers request it, Turner said. He added that another forecast will be available tomorrow, which will need to be factored into this operation. This is not the Corps' preferred operation, said Turner. The Corps' preference would be to hold minimum and refill from now to the end of June. The salmon managers must understand that this operation potentially risks water for summer fish. Recognizing this, we are willing to bring Dworshak up from minimum flow for a few more days if that's what the salmon managers would like to see. Boyce, Ross, and Wills indicated that this would be desirable.

Litchfield recommended that the TMT adopt a conservative approach to the Dworshak operation, given the fact that, in recent years, the forecast tends to overpredict actual runoff volumes. I think there is a potential that we will miss refill at Dworshak by a significant margin this year, he said, particularly if we increase outflow at this time. After a few minutes of additional discussion, Turner reiterated that the Corps is willing to provide up to 100 KAF of additional flow from Dworshak over the next five days, with the caveat that they reserve the

right to change that operation if tomorrow's forecast changes significantly. Steve Pettit observed that many areas in the Idaho mountains have received up to 20 inches of new snow in the past several days; Sno-Tel information indicates that only 2% of the existing snowpack melted during the recent warm weather event.

Turner summarized by saying that the Corps will operate Dworshak to meet the 97 Kcfs week-average flow target at Lower Granite during the period Monday – Monday 20 – 27 May, including the Memorial Day holiday, using up to 100 KAF (50 Ksfd) of Dworshak storage to meet that objective. In all likelihood, that will mean providing an average outflow of 8 Kcfs from Dworshak beginning tomorrow, as natural flows begin to recede, he said. Once the 97 flow objective is met, it was agreed that Dworshak will pass inflow. I want to be clear, however, that the Corps will begin to refill Dworshak some time on May 28, Turner said. If we can use less than 100 KAF and meet the flow objective, we will do that.

With respect to the Brownlee operation, Bowling said it just happens that Idaho Power's planned operation coincides with the operation requested in SOR 2002-4. Moving on to the McNary and Grand Coulee operations, Norris said Reclamation is willing to use Grand Coulee to meet the 246 Kcfs flow target as long as Grand Coulee elevation does not fall below 1240 feet. It looks as though it should be possible to meet the 246 Kcfs flow objective at McNary for the foreseeable future, Norris said; if the forecast or flow conditions change dramatically, we'll convene an emergency call. It was so agreed.

10. Recommended Operations.

Recommended operations were addressed during the previous agenda item.

11. Other.

A. Lower Monumental Full-Flow Bypass. Turner said June 2 is the last scheduled day of full-flow bypass at Lower Monumental; the Corps' position is that as long as the operation does not affect planned research, the Corps is willing to extend the full-flow bypass operation at Lower Monumental through June 20. After a brief discussion, Boyce said the salmon managers will discuss the full-flow bypass operation, and will provide a recommendation to the Corps prior to June 2.

B. MOP+1-MOP+2 at Little Goose. Turner said MOP+1-MOP+2 is in effect at Little Goose at this time; given the current flow situation, that could be rescinded so that we return to MOP at Little Goose if the salmon managers so desire – we can maintain sufficient depth over the sill at the navigation lock without this operation, he said. Once Snake River flows recede, however, we will need to return to the MOP+1-MOP+2 operation, which means some filling at Little Goose probably some time in late June, causing a greater flow reduction temporarily while flows are receding. Boyce and others acknowledged the tradeoff and stated that, even given impacts from a fill while flows are receding, they wanted to aid the fish present at this time. After a brief discussion, it was agreed that the Corps will return Little Goose to MOP later in the week.

C. Adult Fallback at Bonneville. Boyce asked whether the TMT would like a presentation from the researchers on the adult passage and fallback situation at Bonneville this year, particularly the question of whether this year's operation has raised any red flags with respect to delayed adult passage. There was general agreement that such a presentation would be useful.

11. Next TMT Meeting Date.

The next face-to-face meeting of the Technical Management Team was set for Wednesday, June 5. *[Meeting was postponed to Thursday, June 13.]*

Meeting summary prepared by Jeff Kuechle, BPA contractor.

TMT MEETING PARTICIPANTS

MAY 22, 2002

Name	Affiliation
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John Bowling	IPC
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Mike Buchko	PowerEx
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